

AMENDMENT UNDER 37 C.F.R. § 1.116 AND  
STATEMENT OF SUBSTANCE OF INTERVIEW  
Application No.: 10/519,710  
Attorney Docket No.: Q85551

### **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

#### **LISTING OF CLAIMS:**

1. (currently amended): A pulse wave propagation detection system comprising

electrocardiographic signal detection means for detecting ~~an~~ a first electrocardiographic signal at a first point, and for detecting a second electrocardiographic signal at a second point;  
and

eyeground image detection means for detecting ~~an~~ eyeground image data in synchronization with ~~each of at least two different points of the electrocardiographic signal detected by the electrocardiographic signal detection means~~ the first time point and the second time point, and for detecting pulse wave propagation in an intracerebral blood vessel on the basis of a change in a diameter of an eyeground vein, the diameter being measured at a target site of the eyeground image data synchronized with ~~each of the at least two different points of the detected~~ first electrocardiographic signal detected at the first point and the second electrocardiographic signal detected at the second point.

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2. (previously presented): A pulse wave propagation detection system according to claim 1, wherein a state of sclerosis of a capillary artery is detected on the basis of a pulse wave diagram prepared based on the change in the diameter of the eyeground vein.

3. (previously presented): A pulse wave propagation detection system according to claim 1, wherein the target site is an optic papilla.

4. (previously presented): A pulse wave propagation detection system according to claim 1, wherein the change in the eyeground vein diameter is the difference between the diameter of an eyeground vein as measured on the basis of an eyeground image synchronized with an R wave, which is an electrocardiographic signal, and the diameter of the eyeground vein as measured on the basis of an eyeground image synchronized with a T wave, which is an electrocardiographic signal.

5. (currently amended): A pulse wave propagation detection system according to claim 1, wherein the eyeground image detection means detects the eyeground image data, synchronized with the ~~detected-first~~ electrocardiographic signal detected at the first point and the second electrocardiographic signal detected at the second point, by extracting, on a computer display, a stationary eyeground ~~image-images~~ images respectively synchronized with the ~~detected-first~~

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electrocardiographic signal detected at the first point and the second electrocardiographic signal detected at the second point from a motion eyeground image.

6. (currently amended): A pulse wave propagation detection system according to claim 5, wherein the eyeground image detection means extracts the stationary eyeground ~~image~~ images respectively synchronized with the ~~detected~~ first electrocardiographic signal detected at the first point and the second electrocardiographic signal detected at the second point while displaying the motion eyeground image and an electrocardiogram on the computer display.

7. (currently amended): A pulse wave propagation detection system according to claim 5, wherein the eyeground image detection means comprises executing means for calculating the change in the diameter of the eyeground vein on the basis of the eyeground image data synchronized with an arbitrary electrocardiographic signal.

8. (previously presented): A pulse wave propagation detection system according to claim 7, wherein the executing means correlates the change in the diameter of the eyeground vein with pulse wave propagation through an intracerebral blood vessel, thereby detecting the pulse wave propagation.

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9. (previously presented): A pulse wave propagation detection system according to claim 7, wherein the executing means correlates the change in the diameter of the eyeground vein with sclerosis of a capillary artery, thereby detecting a state of sclerosis of the capillary artery.

10. (previously presented): A computer readable storage medium storing a program which executes, on a computer, the pulse wave propagation detection system as recited in claim 5.

**11. (canceled).**

12. (previously presented): A pulse wave propagation detection system according to claim 2, wherein the change in the diameter of the eyeground vein is a change in the diameter of the eyeground vein at an optic papilla.

13. (previously presented): A pulse wave propagation detection system according to claim 2, wherein the change in the eyeground vein diameter is the difference between the diameter of an eyeground vein as measured on the basis of an eyeground image synchronized with an R wave, which is an electrocardiographic signal, and the diameter of the eyeground vein as measured on the basis of an eyeground image synchronized with a T wave, which is an electrocardiographic signal.

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14. (currently amended): A pulse wave propagation detection system according to claim 2, wherein the eyeground image detection means detects the eyeground image data, synchronized with the ~~detected-first~~ electrocardiographic signal detected at the first point and the second electrocardiographic signal detected at the second point, by extracting, on a computer display, a stationary eyeground ~~image~~ images respectively synchronized with the ~~detected-first~~ electrocardiographic signal detected at the first point and the second electrocardiographic signal detected at the second point from a motion eyeground image.

15. (currently amended): A pulse wave propagation detection system according to claim 14, wherein the eyeground image detection means extracts the stationary eyeground ~~image~~ images respectively synchronized with the ~~detected-first~~ electrocardiographic signal detected at the first point and the second electrocardiographic signal detected at the second point while displaying the motion eyeground image and an electrocardiogram on the computer display.

16. (currently amended): A pulse wave propagation detection system according to claim 14, wherein the eyeground image detection means comprises executing means for calculating the change in the diameter of the eyeground vein on the basis of the eyeground image data synchronized with an arbitrary electrocardiographic signal.

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17. (previously presented): A pulse wave propagation detection system according to claim 16, wherein the executing means correlates the change in the diameter of the eyeground vein with pulse wave propagation through an intracerebral blood vessel, thereby detecting the pulse wave propagation.

18. (previously presented): A pulse wave propagation detection system according to claim 16, wherein the executing means correlates the change in the diameter of the eyeground vein with sclerosis of the capillary artery, thereby detecting the state of sclerosis of the capillary artery.

19. (previously presented): A computer readable storage medium storing a program which executes, on a computer, the pulse wave propagation detection system as recited in claim 14.

**20. (canceled).**

21. (currently amended): A pulse wave propagation detection system according to claim 1, wherein the change in the diameter of the eyeground vein is a difference between diameters of the eyeground vein at target sites corresponding to the ~~at least two different points of the detected~~ first electrocardiographic signal detected at the first point and the second electrocardiographic

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signal detected at the second point, and when the difference is substantially recognized, presence of the pulse wave propagation in the intracerebral blood vessel is determined.

22. (currently amended): A pulse wave propagation detection system according to claim 1, wherein the change in the diameter of the eyeground vein is a difference between a first diameter of the eyeground vein at a first target site of the eyeground image ~~in data~~ synchronized with an R wave of the first electrocardiographic signal and a second diameter of the eyeground vein at a second target site of the eyeground image ~~in data~~ synchronized with a T wave of the second electrocardiographic signal, and when the difference is substantially recognized, presence of the pulse wave propagation in the intracerebral blood vessel is determined.